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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/339,963	06/25/1999	ANDREAS V. BECHTOLSHEIM		3287

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EXAMINER

HOANG, THAI D

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/339,963

Applicant(s)

BECHTOLSHEIM ET AL.

Examiner

Thai D Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 07/15/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-21 and 24-65 is/are allowed.
- 6) ☒ Claim(s) 1,2,9,22,23,66 and 67 is/are rejected.
- 7) ☒ Claim(s) 3-8, 68-72 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 66-67 are rejected under 35 U.S.C. 102(e) as being unpatentable over Garcia, U.S patent No. 6,363,078 B1 in view of Spinney et al, US patent No. 6,426,943, hereafter referred to as Garcia and Spinney.

Regarding claims 1 and 66, Garcia discloses a path verification unit that interfaces telecommunications media to a switching matrix. Garcia discloses that the method comprises a first step of sending IDLE symbols until a synchronization time has passed (col. 9, line 27-col. 10, line 31); a second step of sending a variable length packet which comprises a header, payload and CRC (FCS) fields, wherein the header includes a payload type field (PTI field, figures 7-10); Furthermore, Garcia method comprises a third step of sending IDLE symbols if the next packet is not ready to transmit, or returning to the second step if the next packet is ready to transmit (col. 24, lines 53-64.). Garcia does not disclose that the payload type field indicates a length of the payload and it may vary from minimum length to maximum length. However, Spinney discloses a process and apparatus for tracking the number of data bytes associated with data flow. Spinney teaches in figure 41, col. 27, lines 3-11 and col 10,

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lines 52-56 that the header comprises a data length field 1015 for indicating a variable length of the payload which has a maximum value of 1500 bytes. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the length field in the system disclosed by Spinney to Garcia's system in order to adapt with conventional protocols using variable length in Networks.

Regarding claims 2 and 67, as best understood, Garcia discloses that the system supports both synchronous transfer mode (STM) and integrated packet layer (iPL), therefore, the TYPE field identifies the payload format such as Ethernet packets, native IP packets, ATM cells (col. 4, line 5-col. 5, line 9; col. 10, lines 46-53.)

Claims 9 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia in view of Finney et al U.S patent No. 5,570,356.

Regarding claim 9, Garcia discloses that the system transmits the header, payload, and stop symbol. Garcia does not teach that the header, payload, and stop symbol are carried in a plurality n of data lanes of the system. However, Finney discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes (abstract, col. 2, lines 23-38, figures 1-3 and 6.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the parallel method disclosed by Finney into Garcia system in order to speed up the packet transmission in the network.

Regarding claim 22, Garcia does not teach that the system comprises n data lanes to transmit the header and the variable payload of the packet. However, Finney

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discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes. The data is encoded and transmitted in a sequence by encode and serialize unit (fig. 1, elements 116-120.)

Garcia does not teach that the start symbol is transmitted on a first data lane, and the payload data is followed by a stop symbol is transmitted on at least one data lane.

However, Finney discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes.

One of ordinary skill in the art would motivated to adapt Finney method into Garcia's system by transmitting the start symbol on the first data line and the end symbol on at least one of the data line. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the parallel method disclosed by Finney into Garcia system for the same reason as mentioned in claim 9.

Regarding claim 23, Garcia's method inherently comprises the steps of sending the header first, that includes a start symbol, then sending the payload data, and stop symbol. Garcia does not teach that the start symbol is transmitted on a first data lane, and the payload data is followed by a stop symbol is transmitted on at least one data lane. However, Finney discloses a high bandwidth communication system that splits a high speed parallel data word into a number of individual parallel data bytes, i.e. n lanes. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the parallel method disclosed by Finney into Garcia system for the same reason as mentioned in claim 9.

Allowable Subject Matter

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Claims 3-8 and 68-72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10-21 are allowed.

The following is an examiner's statement of reasons for allowance:

Garcia et al, U.S patent No. 6,363,078 B1 discloses a path verification unit that interfaces telecommunications media to a switching matrix. Spinney et al, US patent No. 6,426,943 discloses a process and apparatus for tracking the number of data bytes associated with data flow. Finney et al U.S patent No. 5,570,356 discloses a high bandwidth communication system.

The independent claim 10 of the present application recites a process for transmitting a packet having a header and variable length payload on a communications interface comprising five steps, wherein the payload is transmitted on m data lanes of a plurality of n data lanes

for the case where $m < n$, said fourth step includes sending on said final payload cycle said END symbol on lane $m+1$, and said IDLE symbol on any available data lanes $m=n+2$ through n ;

for the case where $m = n$, said fourth step comprises sending said END symbol on said data lane 0, and said IDLE symbol on said data lane 1 through said data lane n .

Garcia et al, Spinney et al and Finney et al do not teach or fairly suggest the features as shown above.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments with respect to claims 1-2, 9, 22-23, 66-67 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Thai Hoang


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 10/6/03